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ABSTRACT

The association between Lewis M. Terman and the World Book Company is traced in order to gain insight about the role of test publishing in the testing movement. The test publisher assumes the position of an intermediary between the test developer and the educational administrator responsible for making decisions about test adoption. Terman began his association with World Book shortly after World War I. He had a major influence in directing the company to publish group ability and achievement tests, including the Otis Group Intelligence Scale, the Haggerty "Delta" series, the Terman Group Test of Mental Ability, the National Intelligence Tests, and the Stanford Achievement Tests--the first published achievement test battery. Prior to Terman's association with World Book, Houghton Mifflin published his Stanford Binet Intelligence Scale. He also served as an editor of a monograph series aimed at educating teachers and school administrators on the benefits of testing. Terman's association with World Book reflected his role as an advocate and defender of psychological testing. The company, itself, played an influential role in the educational testing movement. A list of 53 footnotes is appended. (Author/GDC)

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Lewis M. Terman and the "World" of Test Publishing

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Lewis M. Terman and the "World" of Test Publishing

As a result of the professional involvement of psychologists during World War I applied psychology came of age in America during the 1920s.[1] Forecasting what was to follow, G. Stanley Hall noted in 1919 that the "war has given applied psychology a tremendous impulse."[2] The psychologists who had worked within the military organization pointed to post-war applications. For example, Raymond Dodge suggested that the testing program developed by the army psychologists would be a "permanent contribution to the organization and utilization of human forces."[3] Clarence S. Yoakum and Robert M. Yerkes specified this prognostication by pointing to applications of the new group testing methods to schools, crime prevention, business, and industry.[4] Pervading the psychologists' delineations of specific practicalities were catch phrases, such as "mental engineering," "organizational efficiency," and "the proper utilization of human talent." Implied then, was a sense that psychology could offer services that would achieve order, efficiency, and control to post-war American society. Such accomplishments had been sought as part of the Progressive Reform movement of the pre-war years.[5] Psychology now had the methods to bring these goals to fruition.

During the 1920s psychologists focused much of their applied activities in business and industry,[6] and made some attempts to deal with issues of marriage and family life.[7] However, the most consistently successful sphere of application was in education, and most notably in the use of psychological tests. The success story of testing in the schools, essentially, was not seriously challenged until the 1960s in the context of the civil rights movement. The purpose here is to consider the role that test publishing played in educational testing.[8] Basically, the test publisher

was in the position of an intermediary between the test developer and the educational administrator responsible for making decisions about test adoption. How this relationship became established, how successfully it worked, and how it survived critical challenges and economic stresses will be examined through the case study of the association begun in 1914 between Lewis M. Terman, one of the leaders of the testing movement, and the World Book Company, a publishing house which pioneered in test publishing and maintained a leading position in this field throughout its separate existence and its eventual merger in 1960 with Harcourt, Brace.[9]

Terman was a man with a mission. Based upon his involvement in the development of the army group tests, he wanted to establish mass testing in the schools so that school children could be properly categorized according to their native ability. The tests would therefore serve as a means of reorganizing each school into a tracking system in which students were placed into homogeneous ability groups or tracks.[10] The type of curriculum in each track would be matched to the ability level of the students. Not only would this lead to more efficient school organization, it would also insure that every child would have a chance to make the most of his or her native ability. What Terman wanted to achieve was a meritocratic society in which each individual was functioning and contributing according to their native potential. Those who were the most intellectually gifted would provide the leadership necessary for social progress as well as for the social welfare of those with lower levels of intellect.

Terman's ideas about intelligence were primarily shaped by the biological determinist perspective of his mentor, G. Stanley Hall, as well as the eugenics of Francis Galton.[11] His advocacy of a differentiated system

of education also owed its heritage to Hall, and his complementary assumption that schools should be in the service of what is good for society was Hallian and was further reinforced by his Stanford department head of education, Ellwood P. Cubberley. For a method of testing intelligence, Terman turned to the work of Alfred Binet, and successfully revised and expanded the Binet-Simon scale in the form of the Stanford-Binet, published in 1916. Unlike most of the other competing Binet revisions produced in America between 1910 and 1916, such as those by H. H. Goddard and Fred Kuhlmann which were published in professional periodicals and disseminated and sold under the auspices of the institutions the test developers were connected with, the Stanford-Binet was published by a publishing company - Houghton Mifflin.[12] Terman's Binet revision became the most widely known and used individual measure of intelligence, a reflection of the sophistication and thoroughness of his work but also benefiting from the fact that it was produced, advertised, and sold through a publishing firm. While Terman was still developing his revision of the Binet, one of his graduate students, Arthur S. Otis, proposed the notion of constructing a group-administrable version for his doctoral dissertation.[13] When Terman began his work on the army testing program in 1917 he brought Otis' test with him, and this instrument served as the basis for the development of the army Alpha and Beta examinations.

The Otis Group Intelligence Scale became the first of its kind to be produced by a publishing house. It was published in 1918 by World Book, and this came about because of Terman's recommendation.[14] Before the war Terman had hoped that his individually-administered Stanford-Binet would be widely adopted for use in the schools.[15] By 1918 with the development of the Otis and the army tests he was eager to have group mental tests published because

of their potential for mass testing in the schools. He had initially contacted Houghton Mifflin, the publishers of the Stanford-Binet, but they were not interested in this new venture.[16] He then turned to World Book, a firm which had published a survey he conducted in 1914 for the Portland, Oregon school system.[17] World Book agreed to publish the Otis scale and looked forward to the subsequent group tests that would be developed after the war.[18]

The World Book Company was founded in 1905 by Caspar W. Hodgson, an 1896 graduate of Stanford University.[19] Among his closest friends at Stanford were classmate Ray Lyman Wilbur, later to be a president of the university, and Herbert Hoover, who was in the class of 1895.[20] Hodgson continued his friendship with Wilbur and Hoover after he left Stanford, and both of these prominent figures remained confidants. In 1902 Hodgson became a Pacific Coast representative for the publishing firm of D. C. Heath.[21] Apparently, through this position he met the Superintendent of Schools for the Philippines, David P. Barrows[22] Barrows complained that he was unable to get publishers interested in preparing textbooks suitable for Phillipine schools, and suggested that Hodgson start a book company for this purpose. Such unorthodox beginnings for the company seemed to portend Hodgson's willingness to pursue new directions in publishing. Thus, when Terman approached him in 1918 about publishing group tests, he sensed the potential market for the fledgling mental test movement.[23] Within the next five years, World Book published several group tests including various levels of the Otis scale, the Haggerty "Delta" series, and three tests that Terman authored or coauthored - the Terman Group Test of Mental Ability (at the junior and senior high-school level), the National Intelligence Tests (derived

from the army Alpha test, at the elementary school level), and the Stanford Achievement Test (the first published achievement test battery).[24] Another instance of the boldness of Hodgson's entry into test publishing was his post-war appointment, with Terman's recommendation, of Otis as the company's editor of psychological and educational tests.[25] Among his many activities Otis launched the firm's divison of test research and service. For twenty years he played a major role in the growth of World Book as a test publisher.

During the 1920s and 1930s Terman's relationship with World Book could best be described as that of a senior professional advisor on test publishing. This role was first manifested by his directing several group tests to the attention of the company.[26] However, his need to do so was lessened as the momentum of the firm's test publishing activities accelerated, and Otis' editorial endeavors became more established. In the early twenties both Terman and Hodgson were concerned with the promotion and marketing of tests - the goal being the widespread use of tests in the schools. One means of accomplishing this was the publication in 1922, by World Book, of a monograph entitled, Intelligence Tests and School Reorganization.[27] This was the report put together by a committee of the National Education Association on the use of intelligence tests in revising elementary education. Terman was the chair of the committee. The committee report extolled the use of testing for school reorganization so that students could be classified into homogeneous ability groups - in other words, a tracking system. Several examples of the use of tests in specific school settings were provided. The report was directed at school superintendents. As was customary in the books published by World Book at the time, advertisements for various tests appeared at the end of the book. These were copies of fliers

and other promotional material that were sent out to school officials. These advertisements reflect the way in which World Book (with the obvious consultation of the test developers) tried to promote test sales. The message conveyed was that school children could be quickly and easily classified according to their "native mental ability." For example, the advertisement for the Terman Group Test of Mental Ability read, "Only 30 to 35 minutes will be required to test a group with it. The procedure has been so simplified that it can be mastered by any teacher in a few minutes. The size of the booklets makes their use without desks easy."[28]

Another means of promoting tests was put forth by Hodgson when he invited Terman to become the editor of a series of textbooks on tests and measurement.[29] The textbooks, which were aimed at teachers and school administrators, were to deal with such topics as intelligence testing, vocational testing, educational measurement, the effects of individual differences on school organization, and educational and vocational guidance.[30] As Terman commented on the goal of the series: "Our education has been mass education. The task of this series is to focus attention on education as adapted to individual abilities and needs."[31] He also saw the series as a way of obtaining a position of leadership for himself in the testing movement. He confided to his Houghton Mifflin publisher: "After spending so many years in helping to initiate the test movement, I feel that it is my duty now to do what I can to help give direction to it."[32] The first book in the series, published in 1923, was by one of Terman's former students, Virgil E. Dickson, about the use of mental tests in the tracking system Dickson had developed for the Oakland and Berkeley, California school

systems.[33] Over the next ten years fifteen more books were published as part of the series.[34]

The decade of the 1920s was a period of growth for both the testing movement in the schools and for the profits of World Book. Educational administrators, by 1918, had already opted for a differentiated curriculum as the best means of providing order and efficiency for a burgeoning population of school children, swelled by large numbers of recent immigrants.[35] As group tests were developed in the early twenties, they were generally welcomed as an expedient tool for sorting pupils into ability groups.[36] After the early rush of enthusiasm, some school officials did criticize the use of tests. However, by 1930 intelligence testing had become a rather common practice in the schools. World Book played a prominent role in this development. The production of intelligence and achievement tests for school use in the 1920s was concentrated in a few publishing houses. Four publishing organizations printed more than half of the tests, and of these World Book had the largest number.[37] Terman's own tests were successful sellers. The sales for the Terman Group Test of Mental Ability (grades seven through twelve) reached an annual figure of 550,000 within a few years of publication.[38] The Stanford Achievement Test was especially profitable. By the end of 1925, two years after its publication, Terman reported that annual sales had reached 1.5 million copies.[39] Thus, by the mid-twenties he began to turn over a sizeable portion of his royalites to support his longitudinal study of gifted children - a project which he most closely identified with his meritocratic vision.[40]

Terman's association with World Book not only served to foster the development of testing, but also helped to fend off the critics of testing.

In 1922 Terman became involved in debates with Walter Lippmann, the journalist, and William C. Bagley, an educational psychologist.[41] Hodgson and other World Book officials were concerned that attacks on testing by critics, such as Lippmann and Bagley, would have grave consequences for the testing movement and consequently for test publishing. To counter such attacks, World Book reprinted copies of Terman's published replies and widely circulated these to school superintendents.[42] As evidenced by the widespread adoption of the tests, the critics had little impact on educational policy in this regard.

The 1930s were a period of financial difficulty for World Book. The Depression had cut into book sales, but test sales continued to do relatively well.[43] The major financial problem stemmed from the management of the company. In 1931 Hodgson had taken some of the company's profits and diverted them for his own use apparently to pay off a blackmail threat involving an alleged "domestic situation".[44] He later justified his actions by stating that he fully intended to replenish the commpany coffers, but as he lamented to his Stanford confidants Wilbur and Hoover, the New Deal legislation so added to his financial woes that he was unable to carry out his intentions.[45] In the meantime the officials and staff at World Book were fearful of bankruptcy and Terman and other authors were concerned about not getting their royalty payments.[46] In 1933, Hodgson was forced out of the company (he died a broken man in 1938),[47] and World Book survived the crisis with a reorganization of management from within the firm.[48]

By 1940 World Book had fully recovered. However, once again the company officials were concerned about renewed attacks on testing.[49] The leading critics were a group of researchers at the University of Iowa, and in

1940 Terman became involved in a debate with the Iowa group.[50] Although it did not work out, he had lined up an author for his textbook series to write a definitive book criticizing the Iowa challenge.[51] With World War II the testing debate subsided and in 1942 Terman had retired from Stanford.

In 1954, two years before his death, Terman wrote an introduction to a publication celebrating the fiftieth anniversary of World Book.[52] He looked back with great satisfaction on his association with the company, and praised it for its pioneering work as a test publisher. He stated that World Book had "exerted a profound influence on American education."[53] Indeed, Terman's association with the company had had a significant impact on the establishment of mass testing in American schools. It would not be until the following decade of the 1960s that disturbing questions were once again raised about the validity and use of testing in the schools, though now the primary concern was with the testing of racial and ethnic minority students. This critique, unlike its predecessors, would effectively challenge the mass-testing policies that Terman and World Book had so successfully helped to create.

Notes

1. See Loren Baritz, The Servants of Power (Middletown, Conn.: Wesleyan University Press, 1960); John M. O'Donnell, "The Crisis of Experimentalism in the 1920s: E. G. Boring and His Uses of History," American Psychologist 34 (1979): 289-295; and Franz Samelson, "Putting Psychology on the Map: Ideology and Intelligence Testing," in Psychology in Social Context,, ed. Allan R. Buss (New York: Irvington 1979), pp. 103-168.

2. G. Stanley Hall, "Some Possible Effects of the War on American Psychology," Psychological Bulletin 16 (1919): 48-49, quote p.48.

3. Raymond Dodge quoted in Clarence S. Yoakum and Robert M. Yerkes, Army Mental Tests (New York: Holt, 1920), p. 185.

4. Yoakum and Yerkes, Army Mental Tests, pp. 188-203.

5. See Samuel Haber, Efficiency and Uplift: Scientific Management in the Progressive Era, 1890-1920 (Chicago: University of Chicago Press, 1964); and Robert H. Wiebe, The Search for Order: 1877-1920 (New York: Hill and Wang, 1967).

6. See Baritz, The Servants of Power; and Michael M. Sokal, "The Origins of the Psychological Corporation," Journal of the History of the Behavioral Sciences 17 (1981): 54-67.

7. See J. G. Morawski, "Not Quite New Worlds: Psychologists' Conceptions of the Ideal Family in the Twenties," in In the Shadow of the Past: Psychology

Portrays the Sexes, ed. Miriam Lewin (New York: Columbia University Press, 1984), pp. 97-125; and J. G. Morawski, "The Measurement of Masculinity and Femininity: Engendering Categorical Realities," Journal of Personality (in press).

8. It should be noted that test publishing was also relevant to other areas of application, such as business and industry, and clinical diagnosis and counseling. However, in terms of consumer choice, rapidity of adoption, and volume of use, education was the setting in which testing first became established in the 1920s and 1930s.

9. No full-scale history of World Book or Harcourt, Brace exists. In 1960 the reorganized firm was known as Harcourt, Brace and World. In 1970, when it acquired the Psychological Corporation, it was renamed Harcourt Brace Jovanovich. For a brief discussion of this last merger see Sokal, "The Origins of the Psychological Corporation," p.54.

10. See Lewis M. Terman, "The Problem," in Intelligence Tests and School Reorganization, eds. Lewis M. Terman, Virgil E. Dickson, A. H. Sutherland, Raymond H. Franzen, C. R. Tupper, and Grace Fernald (Yonkers, N.Y.: World Book Company, 1922), pp. 1-31.

11. See Henry L. Minton, "Lewis M. Terman, Mental Testing, and the Democratic Ideal," Paper presented at the annual meeting of the American Association for the Advancement of Science, New York, May, 1984.

12. Starting in 1913 Terman had several books published by Houghton Mifflin and the guide for administering the Stanford-Binet was contained in a 1916 book published by the firm. See Lewis M. Terman, The Measurement of Intelligence (Boston: Houghton Mifflin, 1916).

13. Roger T. Lennon, "Forward," in Intelligence: Perspectives 1965 - The Terman -Otis Memorial Lectures, eds. Orville G. Brim, Jr., Richard S. Crutchfield, and Wayne H. Holtzman (New York: Harcourt, Brace and World, 1966), pp. vii-x.

14. Ibid., p. ix; and Lewis M. Terman to F. S. Hoyt, 13 November 1921, Terman papers, Stanford University Archives, Stanford, California.

15. See Lewis M. Terman, The Intelligence of School Children (Boston: Houghton Mifflin, 1919), pp. 291-313. Although this book was published after World War I it was based on Terman's pre-war work with the development of the Stanford-Binet.

16. Terman to Hoyt, 13 November 1921, Terman papers.

17. Lewis M. Terman, Medical Inspection, Hygiene Teaching, Physical Training, and Special Schools for Defectives in Portland, Oregon: Report of the Survey of the Public School System of Portland (Yonkers, N.Y.: World Book Company, 1914).

18. Lennon, "Forward," pp. viii-ix; and Terman to Hoyt, 13 November 1921, Terman papers.

19. Stanford University Alumni Directory, Vol. 3, 1891-1920 (Stanford, Calif.: Stanford University, 1921), p. 271.

20. Caspar W. Hodgson, correspondence with Ray Lyman Wilbur, 1926-1937, Wilbur papers, Stanford University Archives, Stanford, California.

21. Stanford Alumnus 4 (1902-1903): 52.

22. Terman to William C. Ferguson, 12 August 1954, Terman papers.

23. Lennon, "Forward," p. viii.

24. The National Intelligence Tests were the collaborative effort of a National Research Council committee composed of Terman, M. E. Haggerty, Edward L. Thorndike, Guy M. Whipple, and Robert M. Yerkes. The committee was funded by the General Education Board of the Rockefeller Foundation. The Stanford Achievement Test was constructed by Terman, Truman L. Kelley, and Giles M. Ruch.

25. Lennon, "Forward,''p. ix.

26. Terman to Hoyt, 13 November 1921, Terman papers.

27. Lewis M. Terman, Virgil E. Dickson, A. H. Sutherland, Raymond H. Franzen, C. R. Tupper, and Grace Fernald (eds)., Intelligence Tests and School Reorganization (Yonkers, N.Y.: World Book Company, 1922).

28. Advertisement for the Terman Group Test of Mental Ability in Terman et al., School Reorganization.

29. Hodgson to Terman, 2 August 1921, Terman papers. The textbook series was eventually, titled the "Measurement and Adjustment Series." The use of the

term "adjustment" was in the sense of "adjustments to meet the problems of instruction and school administration arising out of individual differences." (From a memorandum, Terman to William C. Ferguson, 20 April 1923, Terman papers.)

30. Terman memorandum to Ferguson, 20 April 1923, Terman papers.

31. Ibid.

32. Terman to Hoyt, 13 November 1921, Terman papers.

33. Virgil E. Dickson, Mental Tests and the Classroom Teacher (Yonkers, N.Y.: World Book Company, 1923).

34. Although the Measurement and Adjustment Series continued through the mid-1940s, it was sharply curtailed by the Depression and World War II.

35. See Lawrence A. Cremin, The Transformation of the School: Progressivision in American Education, 1876-1975 (New York: Knopf, 1961); and David B. Tyack, The One Best System: A History of American Urban Education (Cambridge, Mass.: Harvard University Press, 1974).

36. See Tyack, The One Best System, pp. 198-216; and Paul D. Chapman, Schools as Sorters: Lewis M. Terman and the Intelligence Testing Movement, 1890-1930 (Doctoral Dissertation, Stanford University). Ann Arbor, Mich.: University Microfilms, 1980, No. 80-11615, pp. 156-189.

37. See Frank N. Freeman, Mental Tests: Their History, Principles, and Applications (Boston: Houghton Mifflin, 1926), pp. 187-190; and Chapman,

Schools as Sorters, pp. 165-172. The three other leading test publishers were C. H. Stoelting Co., Public School Publishing Co., and Teachers College/Columbia University Press.

38. Terman to Hodgson, 15 October, 1923, Terman papers.

39. A.E. Wiggam, Interview with Terman, 14 and 15 December, 1925, Terman papers.

40. Between 1921 and 1949 Terman donated about $30,000 of his own money to the study of the gifted. This was in addition to funding from various private foundations (Terman memorandum to W. K. Kellogg Foundation on summary of support for the gifted study, 1921-1949, 26 November, 1949, Terman papers).

41. See Nicholas Pastore, "The Army Intelligence Tests and Walter Lippmann," Journal of the History of the Behavioral Sciences 14 (1978): 316-327; and Henry L. Minton, "Lewis M. Terman, Mental Testing, and the Democratic Ideal."

42. Hodgson to Terman, 1 December 1922; Ferguson to Terman, 22 December 1922; Arthur S. Otis to Terman, 4 January 1923; and Hodgson to Terman, 18 January 1923, Terman papers.

43. Terman to Hodgson, 16 December 1930; and Terman to Hodgson, 20 October 1931, Terman papers.

44. Hodgson to Terman, 9 April 1931; Terman to Truman L. Kelley, 31 January 1934; and Kelley to Terman, 2 March 1934, Terman papers.

45. Hodgson to Herbert Hoover, 15 June 1935; and Wilbur to Hodgson, 22 June 1935, Wilbur papers.

46. Terman to O. S. Reimold, 22 November 1933, Terman papers.

47. Wilbur to Daphne Hodgson, 18 February 1938, Wilbur papers.

48. Terman to Reimold, 22 November 1933, Terman papers.

49. Ferguson to Terman, 26 April 1940, Terman papers.

50. See Henry L. Minton, "The Iowa Child Welfare Research Station and the 1940 Debate on Intelligence: Carrying on the Legacy of a Concerned Mother," Journal of the History of the Behavioral Sciences 20(1984): 160-176.

51. Terman to Ferguson, 1 May 1940, Terman papers.

52. Ferguson to Terman, 13 July 1954; and Terman to Ferguson, 22 July 1954, Terman papers.

53. Lewis M. Terman, "Introduction" to the brochure issued by the World Book Company on its fiftieth anniversary, 1955, Terman papers.